

REMARKS

The Examiner is thanked for carefully reviewing the present application. The present amendment is in response to the final Office Action mailed on January 30, 2006 and the Advisory Action mailed on May 23, 2006 regarding claims 1-9. The applicants have thoroughly reviewed the outstanding Office Action including the Examiner's remarks and the references cited therein. The following remarks are believed to be fully responsive to the Office Action and render all claims at issue patentably distinguishable over cited references.

Favorable reconsideration is requested in view of the following remarks.

Claim 1 is amended, and claims 1-9 are now pending in the application. These amendments contain no new matter. The amendment of claim 1 to recite a contact layer, located on the semiconductor layer of the second polarity, is supported throughout the specification and drawings which refer to this layer as contact layer 155.

Claim Rejections under 35 U.S.C. §103(a)

Claims 1-9 are rejected under 35 U.S.C.103(a) as being unpatentable over Ito et al. (US 6,583,442) (hereinafter referred to as "Ito et al.") in combination with Shima et al. (US 4,532,631) (hereinafter referred to as "Shima et al.") and Sugimoto et al. (JP 04061184) (hereinafter referred to as "Sugimoto et al."). These rejections are respectfully traversed. As will be fully explained below, it is respectfully submitted that Ito et al. in combination with Shima et al. and Sugimoto et al. do not render the claimed invention obvious, and the applicants respectfully request that the section 103(a) rejection be withdrawn.

With regard to claim 1, the applicants disclose a light emitting diode (LED), comprising: a semiconductor layer of a first polarity; an active layer, located on the semiconductor layer of the first polarity; a semiconductor layer of a second polarity, located on the active layer; and a contact layer, located on the semiconductor layer of a second polarity, wherein at least one side of a stacked

structure at least composed of the active layer, the semiconductor layer of the second polarity and the contact layer has a wave-shape border in a top view of the LED, thereby reducing the probability of reflecting the light emitted from the active layer, thus making light emitted from the active layer penetrate through the at least one side and be emitted outside the LED, wherein the wave-shape border is formed from an etched surface, and the etched surface is formed by employing one single mask.

Ito et al. disclose a light emitter device, comprising a semiconductor layer 102 of a first polarity; an active layer 103, located on the semiconductor layer of the first polarity; and a semiconductor layer 104 of a second polarity, located on the active layer 103. According to the description and the accompanying diagrams in Ito et al., Ito et al. fail to teach the structural feature recited in claim 1 of the present application that the light emitter device includes a contact layer located on the semiconductor layer of the second polarity. Furthermore, exactly as Examiner said, Ito et al. fail to teach another structural feature recited in claim 1 of the present application that at least one side of a stacked structure at least composed of the active layer, the semiconductor layer of the second polarity and the contact layer has a wave-shape border in a top view of the LED.

According to the diagrams Figs. 1-6 and the relative description in Shima et al., Shima et al. fail to teach the structural feature recited in claim 1 of the present application that the light emitter device includes a contact layer located on the semiconductor layer of a second polarity. Moreover, since the laser disclosed in Shima et al. does not include a contact layer located on the semiconductor layer of a second polarity, Shima et al. fail to teach the structure feature recited in claim 1 of the present application that at least one side of a stacked structure at least composed of the active layer, the semiconductor layer of the second polarity and the contact layer has a wave-shape border in a top view of the LED.

According to the aforementioned description, neither Ito et al. nor Shima et al. teach the technical features recited in the claim 1 of the present application, which include the light-emitting device including a contact layer located on the semiconductor layer of a second polarity; and at least one side of a stacked structure at least composed of the active layer, the semiconductor

layer of the second polarity and the contact layer having a wave-shape border in a top view of the LED.

Since neither Ito et al. nor Shima et al. teach the technique features recited in the claim 1 of the present application, Shima et al. cannot cure the insufficiency of Ito et al. Sugimoto et al. is not cited against claim 1. Therefore, the technical features of the amended claim 1 are not disclosed by the combination of Ito et al., Shima et al. and Sugimoto et al., and claim 1 is therefore allowable.

With regard to claims 2-9, since the independent claim 1 is allowable, dependent claims 2-9 each of which depends from independent claim 1 are likewise believed to be allowable. Accordingly, the applicants respectfully request that the section 103(a) rejections be withdrawn.


CONCLUSION

In light of the above remarks, Applicants respectfully submit that Claims 1-9 as currently presented are in condition for allowance and hereby requests reconsideration. Applicants respectfully request the Examiner to pass the case to issue at the earliest convenience.

Respectfully submitted,

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